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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,995	03/12/2004	Scott P. Campbell		8780

7590 06/03/2005

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EXAMINER

BLEVINS, JERRY M

ART UNIT	PAPER NUMBER
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2883

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/799,995	CAMPBELL ET AL.	
	Examiner	Art Unit	
	Jerry Martin Blevins	2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pre Grant Publication to Zhang et al, number 2003/0035608.

Regarding claim 1, Zhang teaches a method for tuning an inter-channel chromatic dispersion slope of a train of light transmitted on an optical path on a plurality of channels (paragraphs 16 and 17), comprising the steps of: applying the train of light to a dispersion module on the optical path (paragraph 16), the dispersion module having a first dispersion block and a second dispersion block (etalons, paragraphs 16, 47, and 48), and while applying the train of light to the dispersion module, changing a mode number of at least one of the dispersion blocks (accomplished by tuning at least one etalon, paragraphs 16 and 46).

Regarding claim 6, Zhang teaches a method for tuning an inter-channel chromatic dispersion slope of a train of light transmitted on an optical path on a plurality of channels (paragraphs 16 and 17), comprising the steps of: applying the train of light to a dispersion module on the optical path (paragraph 16), the dispersion module having

a first dispersion block and a second dispersion block (etalons, paragraphs 16, 47, and 48) operative on different mode numbers (paragraph 76), the dispersion blocks each having an intra-channel chromatic dispersion slope profile associated therewith (paragraph 18), and while applying the train of light to the dispersion module, symmetrically changing the intra-channel dispersion slope profiles (paragraph 76).

Regarding claim 11, Zhang teaches a method for tuning an inter-channel chromatic dispersion slope of a train of light transmitted on an optical path on a plurality of channels (paragraphs 16 and 17), comprising the steps of: applying the train of light to a dispersion module on the optical path (paragraph 16), the dispersion module having a first inter-channel dispersion slope associated therewith (paragraph 17); and while applying the train of light to the dispersion module, adjusting the dispersion module (by etalon tuning, paragraphs 16 and 46), wherein the adjusted dispersion module has a second inter-channel dispersion slope (paragraph 17) associated therewith, and wherein the inter-channel dispersion slopes are substantially different (paragraph 76).

Regarding claim 12, Zhang teaches the limitations of the base claim 11. Zhang also teaches that the dispersion module has a first dispersion block and a second dispersion block (etalons, paragraphs 16, 47, and 48), and that the adjusting step comprises changing a mode number of at least one of the dispersion blocks (accomplished by tuning at least one etalon, paragraphs 16 and 46).

Regarding claim 14, Zhang teaches the limitations of the base claim 11. Zhang also teaches that the dispersion module has a first dispersion block and a second dispersion block (etalons, paragraphs 16, 47, and 48) each having an intra-channel

chromatic dispersion slope profile associated therewith (paragraph 18), wherein the dispersion blocks are operative on different mode numbers (paragraph 76), and wherein the adjusting step comprises symmetrically changing the intra-channel dispersion slope profiles (paragraph 76).

Regarding claim 19, Zhang teaches a dispersion module for tuning a chromatic dispersion slope of a train of light transmitted on an optical path on a plurality of channels (paragraphs 16 and 17), comprising: a first dispersion block having a first inter-channel chromatic dispersion profile associated therewith (paragraph 17), a second dispersion block coupled to the first dispersion block (paragraph 43) along the optical path, the second dispersion block having a second inter-channel chromatic dispersion profile associated therewith (paragraph 17), wherein the inter-channel chromatic dispersion profiles in combination define a first inter-channel chromatic dispersion slope (paragraph 18), and adjustment means operative on at least one of the dispersion blocks to change the first inter-channel chromatic dispersion slope into a second inter-channel chromatic dispersion slope (accomplished by etalon tuning, paragraph 46)

Regarding claims 2, 7, 13, 15, and 20, Zhang teaches the limitations of the base claims 1, 6, 12, 14, and 19, respectively. Zhang also teaches that the dispersion blocks each comprise one or more etalons (paragraph 16).

Regarding claim 3, 8, 16, and 21, Zhang teaches the limitations of the base claims 1, 6, 11, and 19, respectively. Zhang also teaches that the changing step

Art Unit: 2883

(adjustment means) is performed using thermal tuning of one or more etalons using a thermal tuner for changing the temperature of the one or more etalons (paragraph 20).

Regarding claims 4, 9, 17, and 22, Zhang teaches the limitations of the base claims 1, 6, 11, and 19, respectively. Zhang also teaches that the changing step (adjustment means) is performed using microactuator-driven tuning of one or more etalons using a microactuator coupled to the one or more etalons (paragraph 108).

Regarding claim 5, 10, 18, and 25, Zhang teaches the limitations of the base claims 1, 6, 11, and 19, respectively. Zhang also teaches that the first and second dispersion blocks (etalons) in combination define an intra-channel chromatic dispersion slope profile and that the changing step (adjustment means) does not substantially change the combined intra-channel chromatic dispersion slope profile (paragraph 18).

Regarding claim 23, Zhang teaches the limitations of the base claim 19. Zhang also teaches that the adjustment means changes a mode number of at least one of the dispersion blocks (through etalon tuning, paragraphs 16 and 46).

Regarding claim 24, Zhang teaches the limitations of the base claim 19. Zhang also teaches that the dispersion blocks each have an intra-channel chromatic dispersion slope profile (paragraph 18), wherein the dispersion blocks are operative on different mode numbers (paragraph 76), and wherein the adjustment means symmetrically changes the intra-channel chromatic dispersion slope profiles (paragraph 76).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Martin Blevins whose telephone number is 571-272-8581. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached at 571-272-2415. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMB



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